FINAL REPORT VOLUME II



# Federal Lands Alternative Transportation Systems Study

Financing Opportunities

prepared for

Federal Highway Administration Federal Transit Administration

prepared by

Cambridge Systematics, Inc.

August 2001

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## Federal Lands Alternative Transportation Systems Study

Volume II – Financing Opportunities for Alternative Transportation Systems

prepared for

Federal Highway Administration Federal Transit Administration

in association with

National Park Service Bureau of Land Management U.S. Fish and Wildlife Service

prepared by

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August 2001

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## **Table of Contents**

Exe	cutive Summary	1
1.0	Introduction FHWA Field Structure FTA Field Structure TEA-21 Organization of Report	2 2 3 3 3
2.0	U.S. DOT Funding Programs for Transportation Projects on Federal Lands  Transportation Planning Process  FHWA and FTA Funding Options	3
3.0	Additional Sources of Funding  Revenue Sources  Examples of the Use of Additional Sources of Funding  Financing Tools	26 26 30 31
4.0	Implications and Conclusions  Title 23 and 49 Funding Programs  Additional Sources of Funding.  Actions for Financing Options	34 34 35 35

## **List of Tables**

1.	Federal Lands Highway Program	8
2.	FHWA and FTA Programs with Potential for Funding Federal Lands Projects	13

# **List of Figures**

1.	Major Elements of the Transportation Planning Process	5
2.	Typical Flow of the Planning, Programming, and	
	Project Development Process	6

# Financing Opportunities for Alternative Transportation Systems

### **■** Executive Summary

This report documents many sources of funding that may be available for Alternative Transportation System (transit) projects serving Federal Land Management Agency (FLMA) sites. Both public and private funding sources are addressed in the report, including a wide variety of Federal transportation funding programs. FLMAs are most likely to succeed in financing transit projects if they work with State, regional and local transportation agencies through the metropolitan and statewide transportation planning processes. This working relationship permits the FLMAs to leverage the expertise of Federal, State, regional and local transportation planners who can provide guidance and support through the entire process of planning and project development, as well as in application of financing options. FLMAs are also often able to leverage funding through these relationships. Another benefit of this cooperation will be closer coordination between Federal lands site planning activities and State, regional, and local transportation planning efforts. The recent National Park Service (NPS) draft management policies, for example, acknowledge the need for FLMAs to participate in this process:

"The Service will work cooperatively with other Federal agencies; tribal, state and local governments, regional planning bodies; citizen groups, and others to promote alternative transportation systems (ATS) for park access and circulation and encourage the use of public transportation wherever feasible."

Once involved in the transportation planning and project development processes, there are a number of key financial planning activities that FLMAs need to initiate. Some of the key financial activities are:

- Identify, with State, regional and/or local transportation agencies, sources of public funding that may be used for the project. Both Tables 1 and 2 in this report and the funding table in the NPS Transportation Planning Handbook provide a good starting point for site personnel wanting to initiate this discussion.
- Develop an initial financing plan with State, regional, and/or local transportation agencies after funding needs are identified.
- Perform additional market studies for projects that will involve innovative finance options. For more complex options, an independent financial advisor may be needed.

The Federal Lands Highway Program (FLHP) has been successful in addressing highway needs for the FLMAs. For the NPS, the FLHP program provides the flexibility to fund

1

<sup>&</sup>lt;sup>1</sup>NPS, Management Policies to Guide the Management of the National Park System, 2000.

ATS projects. In FY 2000, the NPS set aside \$8.4 million for ATS projects. It would be difficult for the NPS to dedicate a greater amount of FLHP funding for ATS projects. Funding levels are limited and NPS highway needs alone exceed the resources dedicated to the program. The redirection of a significant amount of current FLHP funding to ATS projects may mitigate the need for some roadway and parking improvements. Overall, however, it will increase the existing gap between roadway infrastructure needs and available funding. Therefore, it is not reasonable to expect that the program, at its current funding levels, provides a viable funding source for ATS in the long term.

There are additional, private sources of funding discussed in this report which have promise to finance some percentage of ATS project needs. How much of the need can be met through these financing concepts depends upon a variety of factors, including the specifics of the project, its location, number of visitors, claims on existing revenue sources, and attractiveness of the project or facility to private investors and supporters.

### ■ 1.0 Introduction

The U.S. Department of Transportation (DOT) provides funding and technical support for Federal lands transportation systems through the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). The FHWA currently provides the majority of technical support and administers the primary U.S. DOT funding programs for Federal lands ATS projects. The FTA primarily provides technical support to the FLMAs. Other U.S. DOT agencies available to assist the FLMAs include the Maritime Administration, the Federal Aviation Administration, the Federal Railroad Administration, the National Highway Traffic Safety Administration, the Federal Motor Carrier Safety Administration, and the Research and Special Programs Administration.

### **FHWA Field Structure**

FHWA's field offices include resource centers, Federal-aid division offices, and Federal Lands Highway (FLH) division offices. The four resource centers support the Federal-aid and FLH division offices. There are 52 Federal-aid division offices<sup>2</sup> that provide front line Federal-aid program delivery assistance to partners and customers in highway transportation and safety services. The Federal-aid division offices are located in each State, in addition to one each in the District of Columbia and Puerto Rico. They provide assistance in the areas of planning and research, preliminary engineering, technology transfer, right-of-way, highway safety, civil rights, environmental concerns, and highway beautification.

There are three FLH divisions (Eastern, Central, and Western), located in Sterling, VA; Lakewood, CO; and Vancouver, WA. These divisions, in coordination with the FLH Headquarters in Washington, D.C., administer the FLHP. The FLHP consists of the Park Roads and Parkways Program, the Public Lands Highways Program, the Refuge Roads Program, and Indian Reservation Roads Program. The Public Lands Highways Program has two components: the Public Lands Highways Discretionary Program and the Forest

<sup>&</sup>lt;sup>2</sup>FHWA Field Offices and Resource Centers web site, http://www.fhwa.dot.gov/field.html.

Highway Program. In addition to administering the FLHP, the FLH field divisions provide planning, research, engineering, and construction supervision services to the FLMAs. They also are responsible for promoting the development of new technology and providing training to engineers throughout FHWA.

### **FTA Field Structure**

FTA's field office responsibilities for transit-related projects parallel those of the FHWA. However, the field structure is quite different. The agency organization is headquartered in Washington, D.C. with 10 regional offices and four metropolitan offices. Each regional office provides both technical and administrative support to states, metropolitan areas, and transit operators.<sup>3</sup>

The FHWA and FTA field structures are presented to provide the FLMAs with a view of the extensive support network that the U.S. DOT has to assist them in the implementation of ATS at their sites.

### **TEA-21**

The Transportation Equity Act of the 21st Century (TEA-21) amends Titles 23 and 49 of the United States code. Titles 23 and 49 are the legislative authority for FHWA and FTA, respectively, and include the U.S. DOT surface transportation programs that provide funding for Federal, State, and local transportation systems. Funding levels for the Titles 23 and 49 surface transportation programs are provided in TEA-21 for FY 1998 through 2003. TEA-21 also revised the eligible activities to be funded in some of the surface transportation programs. Details of FHWA and FTA programs are provided later in this report.

### **Organization of Report**

The remainder of this report is divided into three sections. Section 2.0 provides a very broad overview of the statewide and metropolitan transportation planning processes and describes the U.S. DOT funding programs. Section 3.0 looks at additional sources of funding that have been used in recent years to fund transportation projects and discusses their applicability to finance transit solutions. The final section (Section 4.0) provides implications and conclusions drawn from the information presented in Sections 2.0 and 3.0.

### 2.0 U.S. DOT Funding Programs for Transportation Projects on Federal Lands

This section provides a broad overview of statewide and metropolitan transportation planning processes including statewide and metropolitan transportation plans and trans-

<sup>&</sup>lt;sup>3</sup>FTA regional office information can be found at http://www.fta.dot.gov/office/regional/.

portation improvement programs. The section also outlines the U.S. DOT funding programs in detail.

### **Transportation Planning Process**

Federal regulations require metropolitan planning organizations (MPO) and states to develop long-range transportation plans in order to be eligible for Federal transportation funds. These long-range plans provide for the development and implementation of the intermodal transportation systems of States and metropolitan areas. The transportation plans are updated periodically and have a minimum 20-year forecast period.

The MPOs and States also develop transportation improvement programs that include a priority list of all proposed FHWA- and FTA-funded strategies and projects to be carried out within a three-year period. The transportation improvement programs are updated at least once every two years.

MPOs are the federally-designated forum for transportation planning in urbanized areas of over 50,000 population. The MPOs, in cooperation with states, transit operators, and with input from the public, develop the metropolitan transportation improvement programs (TIP). TIPs include the FHWA- and FTA-funded projects within the boundaries of the metropolitan planning area. TIPs must also include a direct linkage to Federal air quality requirements in areas that do not meet Federal air quality standards. All projects in Federal sites located within metropolitan planning area boundaries that are funded by the FHWA or the FTA, including the FLHP, must be included in the metropolitan TIP.

The statewide transportation improvement program (STIP) includes all FHWA- and FTA-funded strategies and projects within the boundaries of the State. Metropolitan TIPs are included within the STIP, either by reference or by incorporation into the STIP. Each State must submit the STIP to the FHWA and the FTA for approval at least once every two years. The STIP must be financially constrained by year which means that funding sources for each project are identified. All projects in Federal sites located within the State that are funded by the FHWA and the FTA, including the FLHP, must be included in the STIP. In order to accomplish this, each FLMA develops a priority list of FLHP projects (FLHP TIP) for each appropriate State and MPO.

The FLH Division offices exercise the authority to approve FLHP TIPs developed by the FLMAs. After approval by the appropriate FLH Division office, the FLHP TIPs are then forwarded to the States and MPOs for inclusion into the STIP and metropolitan TIP. This assures that all FHWA- and FTA-funded projects and strategies are included in the statewide and metropolitan TIPs as required by Federal law, and also helps to ensure coordination between FLMAs, States and MPOs.

In the case where an FLMA is proposing a regionally significant project, the FLMA is required to coordinate the project with the State and/or MPO throughout the transportation planning process. A regionally significant project can be defined as a transportation project which serves regional transportation needs, and includes, at a minimum, projects on principal arterial highways and fixed guideway transit facilities. The project must also be included in the appropriate long-range metropolitan and statewide transportation plans, as well as listed individually in the appropriate TIPs and/or STIPs.

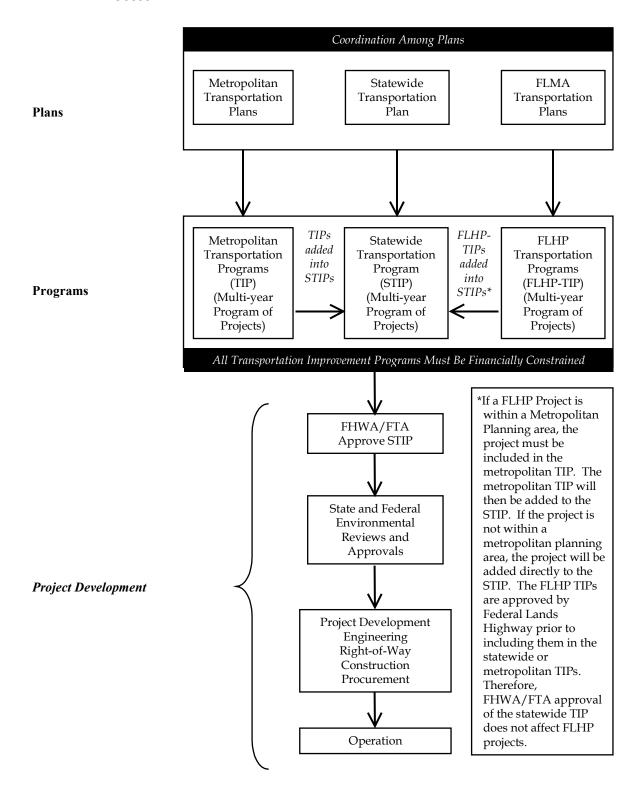
The FLMAs should participate in the statewide and metropolitan transportation planning process, and also encourage the states and MPOs to participate in their transportation planning processes. By coordinating transportation planning efforts, the State and local governments, and the FLMAs will be better able to compete for limited transportation funds and to provide a seamless transportation system serving the needs of the traveling public.

Figure 1 describes the major components of the transportation planning process. Figure 2 represents an example of the flow of activities in the transportation planning and programming processes.

**Public** Planning Involvement **Factors** Transportation Plan Financial Management Considerations Systems Input Transportation Improvement Program Air Quality and Other Local Environmental Officials Considerations Involvement

Figure 1. Major Elements of the Transportation Planning Process

Figure 2. Typical Flow of the Planning, Programming, and Project Development Process



### FHWA and FTA Funding Options

Table 1 provides an overview of the FHWA's FLHP. The FLHP funds are provided by the FHWA to the FLMAs for their use, but each program category has different requirements and restrictions. Table 2 provides an overview of other FHWA and FTA programs which have applicability to projects on Federal lands. The program funds in Table 2 are primarily provided to the States for distribution within their boundaries. To receive benefits from these funding programs, the FLMAs must partner with the States and/or other local governments, or transit operators. Therefore, the distinction between Table 1 and Table 2 is that FLHP funds are provided exclusively for FLMAs, while the other FHWA and FTA funding programs are broadly applied and FLMAs must compete with other non-FLMA organizations for these funds.

Under TEA-21 Congress guaranteed that a minimum level of funds would be made available for spending on transportation programs that are protected by budgetary "firewalls." Although Congress may through its annual appropriations actually reduce available funding below the guaranteed amount for any fiscal year, the firewalls prevent transportation programs from being reduced in order to increase spending for other Federal programs.

Authorizations contained in the TEA-21 for fiscal years 1998-2003 in excess of the guaranteed funding levels may be made available by Congress through the annual appropriations process, but such increases must be considered with and compete against all other domestic discretionary spending.

The programs are all funded by TEA-21 and information for each program can be found at the Fact Sheets and Funding Tables page of the TEA-21 web site, http://www.fhwa.dot.gov/tea21/. More detailed information on FTA programs can be found at the FTA web site at www.fta.dot.gov. In addition, information from the National Park Service Transportation Planning Guidebook was used to complete the tables. This document can be found at http://www.nps.gov/transportation/alt/guidebook.

# Table 1. Federal Lands Highway Program

Funding Eligible Activities F	Fund Distribution	Match	Comments	Capital, O&M
	I		I	
Federal Lands Highway Program (FLHP)				
The PRP program is the primary funding source 2001 \$165M be used to fund transportation provided by the U.S. DOT 2002 \$165M in on planning, research, in accompany to the transportation of any agent the program funds may be used to fund projects on park saystem. PRP program funds may be used to fund projects on park roads and parkways. Park roads and parkways. Park roads and parkways. Park system with title and maintenance responsibility or program funds are which title is under to the U.S. Surface Transportation of any distribution and the U.S. Surface Transportation of any agent to roads that are located under Title 23 that is within projects on adjacent to or provides access to the National Park Postem with title and maintenance responsibility. Park system with title and maintenance responsibility are not limited to, roadway, receiped to a read to fund the U.S. Surface Transportation and bicycle of funding to which title is share for National Highway distribution and the N.S. Surface Transportation administered by the Perugam funds may be used as the non-Federal System Program funds may be used as the non-Federal System Program funds may be used as the non-Federal System Program funds may be used as the non-Federal System Program funds may be used as the non-Federal System Program funds may be used as the non-Federal System Program funds may be used as the non-Federal System Program, and Interstate Program, and Interstate Drogram funds may be used as the non-Federal System Program funds may be used as the non-Federal System Program funds may be used as the non-Federal System Program funds may be used as the non-Federal System Program funds may be used as the non-Federal System Program funds may be used as the non-Federal System Program funds may be used as the non-Federal System Program funds may be used as the non-Federal System Program funds may be used as the non-Federal System Program funds may be used as the non-Federal System Program funds to sell system Program funds to sell system Program funds to sel	PRP program funds are distributed within the NPS in accordance with the 1983 FHWA/NPS interagency agreement, and the "FLHP, PRP Revised Funding Allocation and Project Prioritization Criteria" document.  PRP program funding is composed of 3 categories. Each of these categories receives a specific amount of funding as agreed to by the FHWA and the NPS.  Category II: 3R and 4R projects. The funding is distributed by formula to each region.  Category III: Congressionally mandated projects.  The funding is provided for specific projects.  Category III: Alternative transportation systems planning and implementation. The funding is distributed through an annual call for projects. The Choosing By Advantage process is used to select projects.	Federal share is 100%	PRP program roadway and bridge improvement/ replacement projects are primarily undertaken on park roads and parkways. PRP program roadway and bridge improvement/ replacement projects, however, may be undertaken on other public roads, including State/locally owned and maintained roadways.  Through policy developed by the FHWA and the NPS, pedestrian and bicycle facilities are only funded when associated with roadway improvement projects.	Planning Capital Capital

Program	Overview	Authorized Funding	Eligible Activities	Fund Distribution	Match	Comments	Planning, Capital, O&M
FHWA							
Federal Lanc	Federal Lands Highway Program (FLHP)						
Public Lands Highways - Forest Highway (FH) Program	The FH program is the primary funding source provided by the U.S. DOT for the forest highway network serving the National Forest System. FH funds may be used to fund projects on designated Forest Highways. Forest highways are public roads that provide access to or within the National Forest Highways. Forest Highways are primarily State/local government owned and maintained by the Forest Service.  The FH program is a portion of the PLH Program. G6% of the total PLH funds are set aside for the Forest Highway Program. G6% of the total PLH funds are set aside for the Forest Highway Program. G6% of the total PLH funds are set aside for the Forest Highway Program. Planning and programming of projects are performed through triagency (FHWA, State, and Forest Service) agreements in each state area.	2000 \$162.4M 2001 \$162.4M 2002 \$162.4M 2003 \$162.4M	1. FH program funds may be used to fund transportation planning, research, engineering, and construction of any type of transportation project eligible for assistance under Title 23 on Forest Highways. These include, but are not limited to, roadway, bridge, transit, and pedestrian and bicycle facilities.  2. FH program funds can be used as the non-Federal share for National Highway System Program, Congestion Mitigation and Air Quality Improvement Program, Surface Transportation Program, and Interstate Maintenance Program projects.  3. FH program funds can be used as the non-Federal share for National Scenic Byways activities.	FH funds are allocated to the Federal Lands Highway Division offices by FS region and by the state area for the states which contain national forest lands. Funds may be loaned and borrowed between states.	Federal share is 100%.		Planning Capital

Planning, Capital, O&M			Planning
Comments			The PLH-D program may provide funds for projects on Federal lands, however, there is significant competition for the funds.  Project applications must be submitted by the FLMAs to the State in which the project is located.
Match			Federal share is 100%
Fund Distribution			FHWA issues annual calls for PLH – D projects. States submit project applications to the FHWA. Projects are selected for PLH-D funding by the FHWA from those candidate projects submitted by the States. Funds for selected projects are provided directly to the State transportation departments. Through agreements. Through agreement with the State, FLMAs may directly receive the PLH-D funds from the FHWA if projects they submit through the State are selected for PLH-D funding. The projects are selected by Federanined by the FHWA. Preference is given to those projects which are significantly impacted by Federal land and resource management activities. Preference is also given to projects which are proposed by States which contain at least 3% of the total public lands in the Nation.
Eligible Activities			PLH – D program funds may be used to fund any type of transportation project eligible for assistance under Title 23. Projects include, but are not limited to reconstruction of existing roads, preliminary engineering and design, ITS, planning studies, safety and visitor center enhancements.
Authorized Funding			2000 \$83.6M 2001 \$83.6M 2002 \$83.6M 2003 \$83.6M
Overview		Federal Lands Highway Program (FLHP)	The PLH-D Program is a discretionary funding program within the PLH Program. 34% of the total PLH funds are set aside for select discretionary projects  The FHWA administers the PLH-D program.
Program	FHIMA	Federal Lan	Public Lands Highways - Discretionary (PLH-D) Program

Planning, Capital, O&M		Planning
Comments	l	
Match		100% Federal share
Fund Distribution		A majority of the IRR funds are distributed to the 12 Bureau of Indian Affairs regions using a relative needs formula. \$13 million of the amounts authorized are reserved for projects to replace, rehabilitate, seismically retrofit, paint, apply environmentally acceptable anti-icing or de-icing compositions, or install scour counter measures for deficient Indian reservation road bridges, including multiple-pipe culverts.
Eligible Activities		1. IRR program funds may be used to fund transportation planning, research, engineering, and construction of any type of transportation project eligible for assistance under Title 23 that provides access to or within Indian reservations, Indian lands, Indian communities, or Alaska native villages.  These include, but are not limited, to roadway, bridge, transit, and pedestrian and bicycle facilities.  2. IRR program funds may be used as the non-Federal share for National Highway System Program.  Congestion Mitigation and Air Quality Improvement Program, Surface  Transportation Program, and Interstate Maintenance  Program projects.  3. IRR program funds may be used as the non-Federal share for National Scenic Byways activities.
Authorized Funding		2000 \$275M 2001 \$275M 2002 \$275M 2003 \$275M
Overview	FHWA Federal Lands Highway Program (FLHP)	The IRR program is the primary funding source provided by the U.S. DOT for the Indian Reservation Road system. IRR program funds may be used to fund projects on Indian reservation roads are public roads that are located within or provide access to Indian reservations, Indian lands, Indian communities, or Alaska native villages.  There is a designated network of Indian Reservation roads. Approximately 50% of them are State and locally owned. The other 50% are BIA owned.  The program is jointly administered by the FHWA and the BIA.
Program	FHWA Federal Land	Indian Reservation Roads (IRR) Program

Program	Overview	Authorized Funding	Eligible Activities	Fund Distribution	Match	Comments	Planning, Capital, O&M
FHWA							
Federal Land Refuge Roads (RR) Program	Federal Lands Highway Program (FLHP) Refuge The RR program is the Roads (RR) primary funding source Program provided by the U.S. DOT for the transportation network serving the National Wildlife Refuge System. RR funds may be used to fund projects on refuge roads are public roads that provide access to or within a unit of the National Wildlife Refuge System and for which title and maintenance responsibility is vested in the United States Government. The RR program was a new FLHP category in TEA-21.	2000 \$20M 2001 \$20M 2002 \$20M 2003 \$20M	1. RR program funds may be used for the maintenance and improvement of refuge roads and bridges.  2. RR program funds may be used for the maintenance and improvement of adjacent vehicular parking areas, provision for pedestrian and bicycles, and construction and reconstruction of roadside rest areas, including sanitary and water facilities that are located in and adjacent to wildlife refuges.  3. RR program funds may be used for administrative costs associated with these efforts.	Funds are distributed based upon needs. Projects are selected in coordination between the FHWA and the USFWS.	100% Federal share		Planning Maintenance
	administered by the FHWA and the USFWS.						

Table 2. FHWA and FTA Programs with Potential for Funding Federal Lands Projects

Planning, Capital, O&M		Planning Capital Maintenance
Comments		The ability to use FLHP and FLMA appropriated funds as the non-Federal share provides opportunities to build strong partnerships between the FLMAs and state/local governments.  Project funding is very competitive.
Match		STP projects are funded with an 80% Federal share and with a required 20% non-Federal share. When STP funds are used for Interstate projects, the Federal share can reach 90%. For certain projects that cross Federal lands, the Federal share can be 100%. FLHP and FLMA appropriated funds may be used as the non-Federal share for STP funded activities.
Fund Distribution		STP funds are distributed to the States using the following formula:  25% based on total lane miles of FAH in the state as a % of total FAH lane miles in the U.S.  40% based on total VMT on lanes of FAH in the state as a % of total VMT on lanes of FAH in the state as a sof total VMT on lanes of total VMT on lanes of total VMT on lanes of total VMT on the U.S.  35% based on estimated tax payments attributable to highway users in the state paid into the Fighway Trust Fund as a % of total payments.  Projects are selected through the Statewide and metropolitan transportation planning processes.
Eligible Activities		SIP funds may be used for the following activities:  1. Highway projects on the Federal-aid Highway system including rural arterials, rural major collectors, urban collectors; bridge projects on all public bus terminals and facilities.  2. Programs to reduce extreme cold starts.  3. Environmental restoration and pollution abatement projects.  4. Natural habitat mitigation.  5. Modifications of existing public sidewalks to comply with the Americans with Disabilities Act.  6. Infrastructure-based intelligent transportation system capital improvements.  7. Certain bicycle, pedestrian, and parking facility projects.  8. Certain other trans-portation-related projects.
Authorized Funding		2000 \$5,592M 2001 \$5,703M 2002 \$5,795M 2003 \$5,905M
Overview		The STP provides flexible funding that may be used by States and localities for projects on any Federalaid highway (FAH).  STP funds are provided to State departments of transportation.  Transportation  Transportation  The STP program  funding is set aside for Transportation  Enhancement activities. 10% of the STP program funding is set aside for Program funding is set aside for any programs funding is set aside for safety programs funding is set aside for safety programs funding elimination of hazards of railwayhighway crossings and other hazardous lic road.
Program	FHWA	Surface Transportation Program (STP)

Table 2. FHWA and FTA Programs with Potential for Funding Federal Lands Projects (continued)

							Planning,
Program	Overview	Authorized Funding	Eligible Activities	Fund Distribution	Match	Comments	Capital, O&M
FHWA							
Transportation Enhancements (TE) Program	TE activities are transportation-related activities designed to strengthen the cultural, aesthetic, and environmental aspects of the Nation's intermodal transportation system. TE program funds are provided to State departments of transportation.	10% of STP set-asides plus other mandated projects	TE activities must relate to surface transportation. Activities include, but are not limited to:  1. Provision of safety and educational activities for pedestrians and bicyclists.  2. Scenic or historic highway programs (including provision of tourist and welcome centers).  3. Establishment of transportation museums.  4. Environmental mitigation to address water pollution due to highway runoff or reduce vehicle-caused wildlife mortality while maintaining habitat connectivity.  5. Archeological planning and research.  6. Landscaping and other scenic beautification, historic preservation, historic preservation, rehabilitation, and operation of historic transportation buildings, structures, or facilities.	TE funds are administered through a process established by each State. Funds are typically programmed through the statewide or metropolitan transportation planning process.	TE activities are funded with an 80% Federal share and a required 20% non-Federal share.  FLHP and FLMA appropriated funds may be used as the non-Federal share for TE funded activities.	Because of the aesthetic and environmental emphasis of the program, FLMAs, in partnership with State and/or local governments, often have projects that qualify for TE funds. Project funding is very competitive, because of the wide range of projects that are eligible.	Capital

Table 2. FHWA and FTA Programs with Potential for Funding Federal Lands Projects (continued)

Planning, Capital, O&M		Capital
Comments		The CMAQ program has limited applicability to Federal lands because of the air quality standards requirements, although many major parks such as the Great Smokies and Acadia have air quality problems. The CMAQ program is a good potential source for urban area sites but funding is very competitive.  FLMAs must partner with State or local governments to obtain funding.
Match		CMAQ projects are funded with an 80% Federal share and a required 20% non-Federal share. For projects that cross Federal lands, the Federal lands, the Federal share can reach 100%.  FLHP and FLMA appropriate funds may be used as the non-Federal share of the CMAQ projects.
Fund Distribution		Funds are distributed to States based on population and severity of pollution with weighting factors for ozone and CO maintenance areas, CO non-attainment areas, and ozone submarginal areas. TEA-21 expands funding to PM <sub>10</sub> nonattainment and maintenance areas and areas designated as non-attainment under the revised 1997 air quality standards.  Projects are selected through the Statewide or metropolitan transportation planning process.
Eligible Activities		Projects include, but are not limited to: public transit investments, ITS projects, and nonmotorized transportation projects such as the development of bicycle and pedestrian trails. Other eligible projects are extreme lowtemperature cold start programs and Magnetic Levitation  Transportation Technology Deployment program projects.
Authorized Funding		2000 \$1,358M 2001 \$1,385M 2002 \$1,407M 2003 \$1,434M
Overview		The CMAQ program funds projects and programs in air quality non-attainment and maintenance areas for ozone, carbon monoxide, and small particulate matter (PM <sub>10</sub> ) which reduce transportationrelated emissions.  CMAQ program funds are provided to State departments of transportation.
Program	FHWA	Congestion Mitigation & Air Quality Improvement (CMAQ) Program

Table 2. FHWA and FTA Programs with Potential for Funding Federal Lands Projects (continued)

Planning, Capital, O&M	Planning
Comments	There are a number of NSB and AAR that provide access to or within FLMA sites including the Blue Ridge Parkway, the Natchez Trace Parkway, and the Death Valley Scenic Byway.  Grant applications must be submitted by the FLMAs to the State in which the project is located.  Funding is limited and competitive.
Match	National Scenic Byways projects are funded with an 80% Federal share and require a 20% non- Federal share. FLMAs can provide the non-Federal share for projects on Federal or Indian lands using FLHP and/or FLMA appropriated funds
Fund Distribution	FHWA issues periodic calls for NSB projects. States submit grant applications to the FHWA. Projects are selected for NSB funding by the FHWA from those candidate projects submitted by the States. Funds for selected projects are provided directly to the State transportation departments. Through agreement with the State FIMAs may directly receive the NSB funds from the FHWA if applications they submit through the State are selected for NSB funding.  Priorities for grant distribution are for:  1. Projects on routes designated as either an AAR or an NSB.  2. Projects that would make routes eligible for designation as either an AAR or an NSB.  3. Projects associated with developing state scenic byway programs.
Eligible Activities	National Scenic Byways Program eligible activities include:  1. Activities related to the planning, design, or development of a State scenic byways program.  2. Development and implementation of a corridor management plan.  3. Safety improvements.  4. Construction of facilities for pedestrian and bicyclists.  5. Improvements enhancing access for the purpose of recreation.  6. Protection of recreation.  7. Development and provision of tourist information.  8. Development and provision of tourist information.  8. Development and provision of tourist information.  8. Development and provision of tourist information.
Authorized Funding	2000 \$24.5M 2001 \$24.5M 2002 \$25.5M 2003 \$26.5M
Overview	The NSB Program provides for the designation by the Secretary of Transportation of roads that have outstanding scenic, historic, cultural, natural, recreational, and archaeological qualities as All-American Roads (AAR) or National Scenic Byways (NSB). The program also provides discretionary grants for scenic byways projects on an State-designated scenic byway for planning, designing and developing State scenic byway for planning, designing sand developing State scenic byway for programs.  The FHWA administers the NSB program.
Program	FHWA National Scenic Byways (NSB) Program

Table 2. FHWA and FTA Programs with Potential for Funding Federal Lands Projects (continued)

Planning, Capital, O&M		Capital
Comments		IM funds are generally not applicable for FLMA projects, unless an Interstate is within an FLMAs must partner with State or local governments to obtain funding. Funding is limited and competitive.
Match		IM projects are funded with a 90% Federal share and a required 10% non-Federal share in most cases.  FLHP and FLMA appropriated funds may be used as the non-Federal share on IM projects.
Fund Distribution		IM funds are distributed to the States using the following formula: 33.3% based on total Interstate lane miles in state as a percentage of lane miles in all states. 33.3% based on total Vehicle Miles Traveled (VMT) on Interstates in each state as percent of VMT in all states. 33.3% based on each state's contribution to Highway Account of Highway Trust Fund (HTF) attributable to commercial vehicles as percent of total contributions by all states. \$100M annually is set aside for discretionary obligations by the Secretary of Transportation. Projects are selected through the Statewide and metropolitan transportation planning process.
Eligible Activities		IM funds may be used for resurfacing, restoring, rehabilitating, and reconstructing (4R) routes on the Interstate System. Secretarial agreement is required for use on toll roads. The addition of Single Occupancy Vehicle lanes is not eligible. Up to 50% of apportionments may be transferred to NHS, STP, CMAQ, and/or bridge programs.
Authorized Funding		2000 \$3995M 2001 \$4073M 2002 \$4140M 2003 \$4218M
Overview		The IM program provides funding for improving most routes of the Interstate System.  IM program funds are provided to State departments of transportation.
Program	FHWA	Interstate Maintenance Program (IM)

Table 2. FHWA and FTA Programs with Potential for Funding Federal Lands Projects (continued)

Planning, Capital, O&M		Planning Capital Capital
Comments		NHS funds have limited applicability for FLMA projects, unless a road that is part of the NHS is within an FLMA site or is owned by an FLMA. FLMAs must partner with State or local governments to obtain funding. Funding is limited and competitive.
Match		NHS projects are funded with an 80% Federal share and a required 20% non-Federal share in most cases. FLHP and FLMA appropriated funds may be used as the non-Federal share on NHS projects.
Fund Distribution		NHS funds are distributed to the States using the following formula:  25% based on total lane miles of principal arterials (excluding the Interstate System) in each State as a percent of total such principal arterials arterial lane miles in all States.  35% based on total vehicle miles traveled (VMI) on lanes of principal arterials (excluding the Interstate System) in each State as a percent of total vMI on lanes of such principal arterials in all States.  30% based on diesel fuel used on all highways in each State as a percent of diesel fuel used on all highways in all States.  10% based on total lane miles of principal arterials in each State as a percent of diesel fuel used on all highways in all States.  10% based on total lane miles of principal arterials in each State divided by total population in each State as a percent of such ratio for all States.  Funds are set aside from authorized amounts for the Alaska Highway and the territories.  Projects are selected through the Statewide and metropolitan transportation planning process.
Eligible Activities		In addition to roadway and transit improvements, the following activities are eligible for NHS program funding:  1. Natural habitat mitigation.  2. Publicly owned bus terminals.  3. Intelligent Transportation System capital improvements.  Up to 50% of the NHS program funds may be transferred to IM, STP, CMAQ, and/ or Bridge programs.  Up to 100% of the NHS programs.  Up to 100% of the NHS programs.
Authorized Funding		2000 \$4793M 2001 \$4888M 2002 \$4968M 2003 \$5061M
Overview		The NHS program funds improvements to rural and urban roads that are part of the NHS, including the Interstate system and connections to intermodal terminals. NHS program funds may be used for transit improvements in NHS corridors under certain circumstances.  NHS program funds are provided to State departments of transportation.
Program	FHWA	National Highway System Program (NHS)

Table 2. FHWA and FTA Programs with Potential for Funding Federal Lands Projects (continued)

Planning, Capital, O&M	Planning Capital Maintenance
Comments	Recreational Trails Program funds are applicable to FLMA recreational trails projects. FLMAs must partner with State or local governments to obtain funding. Funding is limited and competitive.
Match	Generally, recreational trails projects are funded with an 80% Federal share and a 20% non-Federal share. If a Federal agency sponsors a project, it may provide additional Federal share of 95%. FLMA appropriated funds may be used to provide the additional Federal funds. FLIP funds may not be used to provide the additional Federal funds.  FLIP funds may not be used to provide the additional Federal funds.  FLIP funds way not be used to provide the additional Federal funds.  Funds from Federal programs, other than U.S. DOT, may be used for the non-Federal share.
Fund Distribution	Recreational Trails program funds are apportioned to the States by formula – 50% equally among all eligible States and 50% in proportion to the amount of off-road recreational fuel use (snowmobiles, all-terrain vehicles, off-road motorcycles, off-road light trucks).  States must meet minimum funding shares among motorized, and diverse trail use as follows:  40% minimum for diverse trail use.  30% minimum for motorized recreation.  30% minimum for non-motorized recreation.
Eligible Activities	Recreational Trails program eligible activities include:  1. Maintenance, restoration and construction of existing and new recreational trails (with restrictions on new trails on Federal land).  2. Development and rehabilitation of trailside and traillies, and trail linkages.  3. Purchase and lease of recreational trail construction and maintenance equipment.  4. Acquisition of easements or property for recreational trail constructions.  5. State administrative corridors.  5. State administrative costs related to program administration (up to 7%).  6. Operation of educational programs to promote safety and environmental protection as those objectives related to the use of recreational trail (up to 5%).
Authorized Funding	2000 \$50M 2001 \$50M 2002 \$50M 2003 \$50M
Overview	The Recreational Trails program provides funds to develop and maintain recreational trails for motorized and nonmotorized recreational trail users.  Recreational Trails funds are provided directly to the States.
Program	Recreational Trails Program

Table 2. FHWA and FTA Programs with Potential for Funding Federal Lands Projects (continued)

Planning, Capital, O&M		Planning
Comments		Most applicable to Federal lands located in urbanized areas under 200,000 such as national monuments and national historic parks and sites.  Must coordinate with the designated recipient.  FLMAs need to work with grantees to identify routes and services that benefit their sites. Modification of existing routes and services may be considered to service FLMA sites.
Match		Typically 80% Federal share with required 20% non-Federal share. 90% Federal share with required 10% non-Federal match for cost of vehicle-related equipment to comply with the Clean Air Act Americans with Disabilities Act. 95%/5% for transit enhancement projects providing bicycle access to mass transit. Another exception to the 80% Federal share is when flexible funds for certain FHWA programs are being used.
Fund Distribution		Funds are allocated to areas with less than 200,000 based on population and population density. Funds are allocated to designated recipients in areas with more than 200,000 based on population, population, population density, and transit data. Designated recipients are public bodies that have the legal authority to receive and disperse Federal funds. The program provides operating assistance only to urbanized areas with a population less than 200,000. 1% is set aside for transit enhancement projects in urbanized areas of more than 200,000. Capital expenses definition includes preventive maintenance for areas over 200,000.
Eligible Projects	l	Section 5307 funds may be used for: Capital transit investments of land, technology, engineering, design, etc., for constructing or improving mass transit infrastructure and operations.  Transit operating assistance to cover costs incurred in operating a transit program, including preventive maintenance for urbanized areas of over 200,000 population and operating and maintenance funds for urbanized areas of under 200,000 population.  Projects that enhance mass transit use, such as bus shelters, landscaping, street furniture, historic preservation, etc.
Authorized Funding		Authorized: 2000 \$2,923M 2001 \$3,147M 2002 \$3,371M 2003 \$3,596M Guaranteed: 2000 \$2,773M 2001 \$2,997M 2003 \$3,446M
Overview		This program provides transit capital and planning assistance to urbanized areas with populations greater than 50,000. Operating assistance is also available to areas under 200,000.
Program	FTA	Urbanized Area Formula Grants (Sec. 5307)

Table 2. FHWA and FTA Programs with Potential for Funding Federal Lands Projects (continued)

Planning, Capital, O&M	Capital
Comments	Section 5309 may be applicable to Federal lands trying to expand transit service and shuttle bus fleets. Section 5309 is not a likely source of funding for most FLMAs, due to competing needs of recipients. The best opportunities for FLMAs are from modification or extension of existing urban or rural transit routes.
Match	Typically 80% Federal share with required 20% non-Federal share. 90% Federal share with required 10% non-Federal match for cost of vehicle-related equipment to comply with the Clean Air Act Amendments or Americans with Disabilities Act.
Fund Distribution	Funds are distributed as follows: 40% to fixed guideway modernization, 40% to new starts, 20% to buses. New starts and bus funds are discretionary. Fixed guideway modernization formula apportionment uses systemwide mileage based on data used to apportion the funding in FY 1998. At least 5.5% of the bus portion must go to nonurbanized areas.
Eligible Projects	New starts include fixed guideway systems, and the development of transit corridors and markets to support eventual construction of fixed guideway systems. Fixed guideway modernization is applied to maintain existing rail, trolley-bus, aerial tramway, inclined plane, cable car, people movers, ferryboats, and high-occupancy vehicle lanes. Bus expenditures are available for new bus fleets and service expansion and other related facilities and services.
Guaranteed Funding	2000 \$2,501M 2001 \$2,646M 2002 \$2,841M 2003 \$3,036M
Overview	This program (formerly Discretionary Grants) provides transit capital assistance for new fixed guideway systems and extensions to existing systems (new starts), fixed guideway modernization and bus and busrelated facilities.  Not a likely source of funding for the FLMAs.
Program	Capital Investment Grants and Loans (Sec. 5309)

Table 2. FHWA and FTA Programs with Potential for Funding Federal Lands Projects (continued)

Planning, Capital, O&M	Capital
Comments	A potential source of funding for small Federal lands projects involving shuttle buses. Relatively small total funding budget is primary constraint, so funding of major projects is unlikely.  No funds were appropriated for FY 1999 or 2000.
Match	80% Federal share with required 20% state/local match.
Fund Distribution	The program provides funding only to grantees that apply, using a formula based on population, fleet size, bus passenger miles, and severity of air quality nonatrainment. Establishes a cap on grants to any one recipient of \$15 million for areas with less than 1 million and \$25 million for areas or 1 million or more.
Eligible Projects	Eligible projects include purchase of clean-fuel buses, construction, modification and/or leasing of associated facilities, and repowering or retrofitting of existing buses. Eligible technologies include compressed natural gas, liquefied natural gas, biodiesel fuel, battery, alcohol-based fuel, hybrid electric, fuel cell or other zero emissions technology.
Authorized Funding	2000 \$200M 2001 \$200M 2002 \$200M 2003 \$200M
Overview	This program assists transit operators in the purchase of lowenissions buses and related equipment, construction of alternatives, modification of garage facilities to accommodate cleandriel whicles, and assist in the utilization of biodiesel fuel. This program is not a likely source of major funding for the FLMAs.
Program	Clean Fuels Formula Grant Program

Table 2. FHWA and FTA Programs with Potential for Funding Federal Lands Projects (continued)

Planning, Capital, O&M	Planning (limited), capital, operating	Capital maintenance
Comments	de by the regional vate non-for rural Coorditeway s essential. MAs are in lareas. etween d transit been stablishing IA sites, Springs lky itional g is lim-	Not a likely source of (funding but to the sextent that sites attract elderly travel groups, this program could be applicable.
Match	80% Federal share and 20% non-Federal share for capital and project administration. 50% Federal share for operating costs and 90% Federal share for incremental costs of complying with Clean Air Act Amendments or Americans with Disabilities Act.	Typically 80% Federal share for capital and purchased services with required 20% non-Federal share. 90% Federal share with required 10% non-Federal match for incremental costs of complying with Clean Air Act Americans with Disabilities Act.
Fund Distribution	Funding is allocated to states by a formula based on non-urbanized population. States are responsible for distributing funds equitably within the state.	Funding is allocated to states by a formula based on elderly and disabled populations.
Eligible Projects	Eligible grant recipients include public and private non-profit organizations. Capital and operating costs of public transit service in rural and small urban areas. Support for rural intercity bus services is also eligible.	Eligible expenses include vehicle acquisitions, purchased services and administrative support.
Authorized Funding	Authorized and Guaranteed: 2000 \$193.6M 2001 \$209.3M 2003 \$224.9M 2003 \$240.6M	Authorized and Guaranteed: 2000 \$72.9M 2001 \$78.9M 2002 \$84.7M 2003 \$90.7M
Overview	This program provides transit capital and operating assistance, through the states, to nonurbanized areas (less than 50,000 population).  Primarily used to fund transit authorities in rural areas.	This program provides transit capital assistance, through the states, to organizations that provide specialized transportation services to elderly persons and to persons with disabilities.
Program	FTA Formula Program for Other than Urbanized Areas (Sec. 5311)	Formula Grants and Loans for Elderly Individuals and Individuals with Disabilities (Sec. 5310)

Table 2. FHWA and FTA Programs with Potential for Funding Federal Lands Projects (continued)

Planning, Capital, O&M	Planning lica- capital As, s pant TS Ty pu-
Comments	This program is probably not applicable for most FLMAs, though as an employer, FLMAs could be a participant in a local project.  Some FLMA sites have identified ATS as a means of addressing labor shortages caused by isolation from population centers.
Match	50% Federal share with 50% required non-Federal match.
Fund Distribution	Grant awards are based on:  1. The % of population that are welfare recipients.  2. The need for additional services.  3. Coordination with and the use of existing transportation providers.  4. Coordination with state welfare agencies implementing the TANF program.  5. Use of innovative approaches.
Eligible Projects	A coordinated transportation/human service planning mechanism is required to develop Access to Jobs programs. The reverse commute program provides services to suburban employment centers from other areas.
Authorized Funding	Authorized: 2000 \$150M 2001 \$150M 2002 \$150M 2003 \$150M 2000 \$75M 2001 \$100M 2002 \$125M 2002 \$125M 2003 \$150M
Overview	This program provides competitive grants to local governments and nonprofit organizations to develop transportation services to connect welfare recipients and lowincome persons to employment and support services.
Program	Job Access and Reverse Commute Grants

Table 2. FHWA and FTA Programs with Potential for Funding Federal Lands Projects (continued)

Planning, Capital, O&M	Capital
Comments	Probably not applicable
Match	50% Federal share with 50% required non-Federal match, except in FY 2000, the Federal share is 90% for intercity fixed route providers.
Fund Distribution	Grants awarded in a competitive process based on:  1. The identified need for service.  2. Acquisition of required equipment ahead of required timeframes.  3. Financial capacity.  4. Service impacts in rural areas and for low-income individuals.
Eligible Projects	Eligible expenditures include capital costs associated with making OTRBs wheelchair accessible and training.
Authorized Funding	2000 \$3.7M 2001 \$4.7M 2002 \$6.95M 2003 \$6.95M
Overview	This new program will assist in financing the incremental capital and training costs associated with implementing DOT's Final Rule on accessibility requirements for Over-The-RoadBuses (OTRB)
Program	Rural Transportation Accessibility Incentive Program

### ■ 3.0 Additional Sources of Funding

In 1994, President Clinton issued Executive Order 12893, which established more costeffective investment as a priority for the Administration and directed Federal agencies to seek greater private sector participation in infrastructure investment and management. Since that time, all Federal agencies have focused on ways to leverage Federal investments, thereby obtaining a higher return for Federal dollars invested, and are developing policies and programs to attract private sources of funding for investments in infrastructure.

Additional sources of funding encompass a broad range of revenue options and financing tools. These sources are used to expand the pool of resources available for funding infrastructure and accelerate the development of projects that might otherwise be held back due to funding limits from the traditional funding sources.

It is important to note that, as a general rule, additional sources of funding do not represent new sources of Federal funds. Rather they represent sources of revenue outside the traditional Federal funding programs. These additional funding sources are normally used to supplement and leverage Federal sources.

Two categories of additional sources of funding are described in the remainder of this section: revenue sources and financing tools. Revenue sources are non-traditional, non-Federal sources that provide funding for specific transit projects. Financing tools are primarily mechanisms to leverage funds obtained from other sources.

### **Revenue Sources**

A variety of revenue sources have the potential to provide funding for ATS projects. Following is a description of various options for funding transit needs. It is important to note that the amount of funding that might be raised depends to a large extent on the characteristics of the project or the program of projects being funded. The site location, the purpose for which funding is needed, and numbers of visitors all affect the likelihood of obtaining funding.

The revenue sources identified as part of this report include:

- User fees;
- Private sponsorships;
- Advertising;

- State and Local Funds;
- Fund raising and contributions; and
- State Infrastructure Banks.

### **User Fees**

A user fee is a fee charged to a user of a facility, which is used to cover or defray the cost of providing the facility or a specific service. In a transportation context, user fees include tolls, fares, and parking fees. Other user fees include permit fees, license fees, and use permits.

In any user fee arrangement, a determination must be made of the costs that the user fees are expected to cover. The fee may be structured to cover only operating costs, or capital as well as operating costs. Alternatively, a user fee may be structured to cover all or a portion of the cost of the ATS service or facility. In any event, a balance must be achieved between the costs to be covered and the impact of the fee on the demand for park visitation. Stated differently, user fees can be valuable in raising revenues, but the existence of a fee may also reduce the number of visitors to a facility. How much a fee impacts visitation is a function of the attractiveness of the facilities and/or service, the cost and availability of other options, and the amount the fee is increased over the previously charged fee.

Federal lands sites can charge fares for riding ATS, similar to those charged by a traditional transit system. One of the problems with this is that average party size is relatively high, and fares can become expensive for families and large groups. If free parking is available at their desired destinations, they are likely to remain in their automobile rather than using mass transit. Family or group fares can be used to mitigate this problem.

Water transportation systems and trams are generally more successful in charging fees than traditional shuttle bus services. Such fees can be substantial such as the distance-based fares in Denali NP, which range from \$12.50 to \$31 for adults. The Manitou Island Transit Ferry at the Sleeping Bear Dunes NL charges \$20 for a round-trip fare and the NPS charges an additional \$7.00 for admission to the National Lakeshore. The ability to charge these higher user fees without inhibiting usage is limited to transit systems that are a desirable component of the visitor experience and that serve sites where other options for access are not available.

However, there are impediments to charging user fees at various sites. The Great Smoky Mountains National Park, for example, cannot by legislation charge entry fees. This increases the challenge of providing transit service within the park at Cades Cove, which is currently overwhelmed with automobile traffic at peak periods. Acadia National Park initially instituted fares on a limited transit system but found little interest among visitors. The park and its partners made a decision to provide free service when they implemented the Island Explorer shuttle bus system in 1999, and raised revenue from a variety of other sources. These examples highlight the need for thorough planning and analysis when developing a financing strategy for a transit system, especially those that include user fees.

Sites that have authority to do so can charge fees for vehicles to enter sites and use part of the fee to subsidize transit. The authority to do this is provided by Congress for a limited time through the Recreational Fee Demonstration Program.

**Recreational Fee Demonstration Program -** This program was initially authorized by Congress in 1995 and subsequently extended through fiscal year 2001. The fee demonstration program permits participating Federal lands sites to retain 80 percent of fees charged for internal use. These fees have been used primarily to address deferred maintenance requirements, although some sites have used funds for transit needs. Adams National Historic Site in Massachusetts, for example, has used a \$2 per person fee to help fund a trolley service that connects three separate sites. The program has been the subject of extensive evaluation, which is documented in several reports to Congress. In general, the program has been regarded by the participating agencies as a success. Whether the

funds derived from recreational fees can be used to support transit projects depends on other competing funding needs, the level of fees generated, the cost of transit improvements, and the extension of the Fee Demonstration Program.

### Private Sponsorships

Private sponsorships have been used for many years as a means to raise funding for recreational and quasi-public purposes. They range from large corporate sponsorships to individual contributions. A sponsorship may be attached to a specific facility, such as a sports stadium, or a major event, such as the Olympic Games. Sponsorships are also used to support the ongoing work of special purpose organizations, such as the Colonial Williamsburg Foundation or the Nature Conservancy.

The support provided through a sponsorship may be provided in the form of cash or in donations of products or services.

Private donors choose to provide financial support for one or both of the following reasons:

- To increase the visibility of the donor and to project a positive image. In this regard, providing financial support through a sponsorship can be viewed as a form of advertising. Most corporations provide sponsorships for this purpose.
- To demonstrate support for the goals and objectives of the recipient organization. Most individuals make contributions for this purpose.

For the purpose of funding transit projects, the FLMAs have more in common with organizations such as the Colonial Williamsburg Foundation than with major league sporting events. Sporting events offer huge media markets and, consequently, can command sponsorships valued at millions of dollars. Even for those facilities that experience large numbers of visitors, the cost of offering sports type sponsorships must be carefully evaluated against the benefits. National Parks such as Yellowstone or Yosemite may have the potential to yield lucrative sponsorship contracts, but it is highly likely that the visiting public would view such efforts as nothing more than "selling" facilities that should be held within the public trust.

The model of the Colonial Williamsburg Foundation would ensure a less commercial environment, but would yield a very different base of support from sponsorships. Colonial Williamsburg receives over 80 percent of its support from individuals rather than corporations, and its largest corporate gifts are valued at \$445,000 to \$1.0 million, with the average gift being much smaller. The Colonial Williamsburg Foundation provides a good model for FLMAs since its primary missions are historic preservation and education, not entertainment.

### Advertising

The public transit industry had some success in recent years by allowing advertising in stations, in bus shelters, and on transit vehicles. The general concept is that an organization may publicize itself or its programs in exchange for a fee. Higher advertising payments require that higher levels of visibility be granted. An advertiser may choose to do

general image advertising or more targeted advertising (for example, a neighboring business may wish to place a sign in a nearby transit station).

Another advertising possibility is through the Internet. This would most likely be in the form of allowing links to private transit provider web sites. Transit providers may be willing to pay for the exposure that links on FLMA Internet sites would provide. This is a new concept for FLMA web sites and would have to be closely monitored.

The use of advertising to support transit projects will require a careful balancing of two somewhat conflicting objectives. While the funding requirements of ATS projects may call for extensive use of advertising as a component of the funding strategy, the FLMAs may have valid concerns about "commercializing" National Parks and other Federal lands.

### State and Local Funds

State and local option taxes have been commonly used to finance transit system improvements. These include general sales tax surcharges or increments, in addition to more targeted taxes on tourist-related expenditures. Items subject to these taxes may include hotels, restaurants, rental cars, and tickets to events such as theatre, sports, concerts, and festivals.

Such taxes often are difficult to implement but are well-suited to many sites that have strong links to gateway communities. For example, four municipalities on Mount Desert Island in Maine voted to dedicate a portion of their property tax to support the new Acadia NP Island Explorer transit system. In less-populated gateway communities residents may have limited resources to provide local or matching funds. However, taxes on tourist-related expenditures can generate substantial revenues that are paid primarily by non-residents, and thus are politically more attractive than locally generated sources. Local option taxes are most likely to be a viable funding mechanism when a new ATS provides transit service for the local community, in addition to the Federal lands site. Another case where local option taxes may be viable is if it can be shown that the use of transit will create economic benefits to the local area in the form of new jobs and spending.

### **Fund-Raising and Contributions**

An alternative method of raising these funds is through direct contributions from local businesses. This may be feasible where businesses see a direct benefit from the implementation of transit in their communities. The Acadia NP Island Explorer system, for example, goes directly to the door of hotels and motels that provide a contribution to the system. While a voluntary system can avoid the political difficulties involved in implementing taxes, it is less stable and reliable over the long term.

"Friends" groups and support organizations contribute substantial sums of money to many of the major Federal lands sites. These contributions have been used primarily for trail and facility development but could be used for transit projects as well.

### State Infrastructure Banks

The National Highway System Designation Act of 1995 authorizes 34 states to set up infrastructure investment funds, known as State Infrastructure Banks (SIB), to make loans and

provide assistance to surface transportation projects.<sup>4</sup> This program is designed to give states the capacity to increase the efficiency of their transportation investment and significantly leverage Federal resources by attracting non-Federal public and private investment.<sup>5</sup> States have greater flexibility because they are allowed to pursue other types of project assistance in addition to the traditional reimbursable grant.

SIBs offer below-market rate subordinate loans, interest rate buy-downs on third-party loans, and guarantees, and other forms of credit enhancement. SIBs are created with Federal seed money and offer states and local partners greater flexibility regarding the financial management of transportation projects. Perhaps the strongest aspect of this program is the ability to leverage Federal funds. Eligible projects include both highway and transit capital investments.

### **Examples of the Use of Additional Sources of Funding**

**Acadia National Park -** Acadia National Park in Maine provides a good case study of a successful project implementation with local, State, and Federal funding partners. The Island Explorer transit system was created through the use of federally provided funds and local matches. The system links four adjacent gateway communities and circulates within the park, with stops at major park attractions and recreation areas.

The island-wide transit system was originally conceived by the Mount Desert Island League of Towns. The League was established in 1995 and consists of town managers from the four towns on Mount Desert Island. Acadia National Park and three nearby communities also have a representative on the League. The League formed a partnership for the transit project with a local nonprofit public transportation provider, members of the local business community, and the Friends of Acadia which is a nonprofit organization that supports the park.

These partners submitted a grant application for Maine DOT's "T2000" grant program. The "T2000" grant program, funded by the Federal CMAQ program, provides funding to reduce local congestion in rural regions. Two grants, totaling \$628,000, were awarded by the State of Maine to the project partners for the purchase of eight propane-fueled buses.

The Federal CMAQ program requires non-Federal matching funds. The partners raised funds for the required local match, and also for operations and maintenance costs. The four Mount Desert Island towns approved project funding at their annual town meetings, the Bar Harbor Chamber of Commerce obtained contributions from local businesses, and local partners donated material resources for project implementation. The contributions from the private sponsors, the business community, local municipalities, the Friends of Acadia, and the NPS assured that adequate funds were in place to establish a viable transit system. The transit system was implemented in 1999 with ridership exceeding expectations.

<sup>&</sup>lt;sup>4</sup>TEA-21 authorizes SIBs in four new states (California, Florida, Missouri, and Rhode Island).

<sup>&</sup>lt;sup>5</sup>FHWA fact sheet for the State Infrastructure Bank Program and *Statewide Transportation Planning Under ISTEA: A New Framework for Decision-making*, U.S. DOT, FHWA and FTA.

Grand Canyon National Park - Grand Canyon National Park has adopted a General Management Plan that calls for comprehensive measures to improve the visitor experience and protect the Park's resources by modifying development on the canyon rim and by developing a visitor transportation system. The plan calls for the development of a ninemile, double-track light rail transit line (LRT) linking a major parking area and transit center located on U.S.D.A. Forest Service land outside the south boundary of the Park to two stations near the south rim.

All day-visitors to the south rim will be required to use the light rail line to reach the canyon rim. Tour buses and other transit vehicles carrying day visitors would stop at the transit center and transfer their passengers to the LRT line. Visitors staying in Park lodging or campgrounds would be able to drive to their accommodations and then would have to leave their vehicles parked while visiting the area.

The estimated capital cost of the proposed transportation system is \$150 million. Operating costs of about \$20 million per year are expected. The Park plans to implement the transportation system through a concession contract. The successful proposer will be required to finance all aspects of the system, including design, construction, operations and maintenance. It is expected that the cost of the system will be funded by user fees collected by the concession contractor. However, funding from other sources, including fee demonstration money, FLHP funds and NPS line item funds have been used to fund initial planning and preliminary design activities.

### **Financing Tools**

The funding sources described above individually and collectively provide a range of options that could generate additional funding for transit projects. Maximizing the benefit of additional funding will most likely require the use of other financing tools. What follows is a description of a series of financing tools that could be used to leverage revenues and finance transit projects. This is not intended to be an exhaustive list of every financing option that is available. Rather, the discussion provides an overview of the range of concepts and financing approaches that may be used to finance transit projects.

The financing tools described below include:

- Public-Private Partnerships;
- Bonds;
- Certificates of Participation (COP);
- Leasing; and
- Federal credit.

### **Public-Private Partnerships**

A public-private transportation partnership is an agreement between a public entity and a private organization, which provides for coordinated actions to plan, finance, construct, operate, and maintain a transportation facility or system. There is a wide variety of models of public-private ventures, but the essential element of all of them is a sharing of

responsibility for raising capital and project risk. By sharing responsibility, the public entity is able to reduce the direct cost to the government of the facility and encourage private investment. Franchises and concessions are forms of public-private partnerships under which a privilege is conferred upon an organization or an individual by a government to provide a service or operate a business. Franchises generally refer to the operation of public utilities while concessions refer to food, retail, or entertainment operations. Either could be used to describe operation of transportation services on Federal lands. A governmental entity could grant a private company the right to provide a specified service under a set of defined business conditions, which will ensure that the government receives the services it requires and the company providing them is able to make a reasonable profit. A franchise or concession might call for the private entity to make capital investments as well as providing ongoing operations, or it could be limited to maintenance and operations.

Two examples of public-private partnership structures include:

- 1. **Build-Operate-Transfer (BOT) Model -** Private entities receive a franchise or concession to finance, build, and operate the project for a fixed period of time after which ownership reverts to the host public entity; and
- 2. **Buy-Build-Operate (BBO) Model -** Private entities buy legal title to an existing facility, modernize or expand it, and operate it as a profit-making public use facility.

The primary benefit of franchises and concessions is the flexibility that they allow in providing service. Federal lands sites often experience varied seasonal demand patterns. A private entity could more easily adapt their schedule and labor force to such conditions. Also, using a franchise or concession from a private group means that the FLMA is buying existing service expertise and does not need to train their own staff or hire new staff to provide the necessary service.

The Presidio Trust is an innovative example of a public-private partnership. It is currently an executive agency of the U.S. government but its financial plan calls for self-sufficiency through lease revenues by 2013. The Presidio is a historic military fort and part of the Golden Gate National Recreation Area. The financial management program outlines how revenues generated from the rehabilitation and rental of Presidio buildings will fund environmental and infrastructure improvements. The Presidio contains many historically significant structures and the Trust plans to renovate and lease the buildings to the private sector. By 2013, the revenues will be large enough to no longer require additional Federal funding. One potential use of the revenues is to assist in funding transit projects.

The NPS also has extensive experience with the use of public-private partnerships for operating its visitor facilities. Specific examples include gift shops, food and beverage service facilities, and overnight accommodations. Visitor transportation services are provided through franchise or concession arrangements at a number of the NPS facilities. These include the passenger ferry service providing access to the Statue of Liberty National Monument.

For these types of public-private partnerships to be viable there needs to be a reasonable expectation that sufficient business can be generated to support the cost of providing the

service. In addition, if one of the objectives is to transfer responsibility of the capital investment to the private sector, the term must be long enough for the investment to be fully amortized.

### **Bonds**

Bonds are debt instruments issued for periods of more than one year with the purpose of raising capital by borrowing. The Federal government, states, cities, corporations, and many other types of institutions sell bonds. A bond is generally a promise to repay the principal along with interest on a specified date (maturity). Bond principal and interest payments can be met either from dedicated revenues (such as the user feeds described above) or general tax revenues.

A few states have started to finance transportation investments with a new instrument, known as GARVEE bonds. A GARVEE bond is a type of grant anticipation note, for which capital is raised based on a pledge of future anticipated grant revenues. In this case, the anticipated grant revenues are Federal highway funding apportionments expected in future years. The advantage of using GARVEE bonds is that this enables a State to accelerate needed transportation projects and complete them before all of the Federal funding is in place. The disadvantage is that funding in future years is effectively reduced, limiting the State's ability to fund other projects at that time.

### Certificates of Participation (COP)

A certificate of participation is a financing instrument in which an investor buys shares of lease revenues of an agreement made by a municipal or governmental entity, rather than purchasing a bond secured by those revenues. COPs are used when a State faces limits on its ability to increase taxes or issue other forms of debt (such as California's Proposition 13 limits). This instrument is used in the public transit industry to purchase equipment.

### Leasing

A lease is a contract under which an owner of property or asset allows another party to use the property or asset for a specified period of time in exchange for payment of rent or of use fees. A lease may or may not include a purchase option under which the lessee can apply lease payments toward the purchase price of the property or asset being used.

The principal benefit of leasing is that it reduces the up-front cost of major capital purchases and allows payments to be spread out over an asset's useful life or planned period of use. It also allows for the use of capital assets for a limited period of time without having to acquire them outright.

### Federal Credit

TEA-21 authorized a new Federal credit program, known as the Transportation Infrastructure Finance and Innovation Act (TIFIA), which is designed to support large, nationally significant transportation projects. TIFIA provides direct loans, loan guarantees, and standby lines of credit for large projects – those costing over \$100 million. The program provides secondary or subordinate capital, repaid from dedicated project revenue streams, for up to one-third of the project costs. The project's senior debt must be investment grade.

TIFIA assistance is available to public or private entities seeking to finance, design, construct, and operate a major surface transportation project. Such entities include State departments of transportation, local governments, transit agencies, special authorities, special districts, railroads, and private companies or consortia. The program does not contemplate lending directly to other Federal agencies (i.e., outside the Department of Transportation), but may have applicability to ATS projects sponsored or undertaken by eligible organizations.

Since TIFIA is a government sponsored credit program, borrowers are able to negotiate more favorable terms (e.g., longer payback periods) than may otherwise be available from private capital markets. Applications for TIFIA assistance will be solicited at least once a year during the authorization period of TEA-21.

### 4.0 Implications and Conclusions

It is difficult to draw definitive conclusions on the potential for financing FLMA transit projects through the funding options described in this report. However, it is clear that all the funding sources will be effectively utilized only if FLMAs are knowledgeable of the availability and applicability of various sources, and have continuous, coordinated, comprehensive planning and project development processes integrated into their ATS programs. This includes a close working relationship with State, local, and tribal governments, gateway communities, and private organizations.

Below are some general conclusions about the different funding options.

### Title 23 and 49 Funding Programs

Chapter 2 of Title 23 includes the FLHP which provides funding exclusively for the FLMAs, and is administered by the FHWA. The FLHP primarily provides funding for roadway and bridge projects, although three categories of FLHP funds may be used for transit projects: the Park Roads and Parkways Program, the Forest Highway Program, and the Indian Reservation Roads Program. However, when FLHP funds are used for transit projects, there are fewer funds available for roadway and bridge projects. There is currently a gap between the funds needed by the NPS to maintain its roads and bridges in their current conditions and the funds made available through the FLHP. Therefore when FLHP funds are used for transit projects rather than roadway and bridge projects, this gap increases. Furthermore, public law prohibits the use of FLHP Refuge Roads Program funds for transit. The BLM does not have a dedicated source of funding for transit.

In the case of the other programs administered by the FHWA, the vast majority of funding is allocated to the states by formula; it is the decision of the states, MPOs, and their members, as to which projects are funded. Therefore, in order for FLMAs to be beneficiaries of these funds, FLMA transit projects must be sponsored by State and local transportation authorities, programmed through the statewide or metropolitan transportation planning processes, and be deemed a higher priority than other State or metropolitan transportation projects. Although this approach has worked in some instances, it will not work in all instances. States may oppose using Title 23 sources to pay for projects that are entirely or

primarily on Federal lands (e.g., within a national park). States may be more willing to use Title 23 sources for access improvements to Federal lands based on the potential benefits for gateway communities.

In the case of programs administered by the FTA, a large percentage of transit resources are distributed in a discretionary manner, and funding FLMA transit needs again would be competing against State and local transit priorities established in the transportation planning process. Transit funds overall are limited, and FLMA needs are unlikely to fare well against State and locally sponsored mass transit needs.

### **Additional Sources of Funding**

There are additional sources of funding that have potential for financing a portion of transit project needs. How much of the need can be met through these financing concepts depends upon a variety of factors, including the specifics of the project, its location, number of visitors, claims on existing revenue sources, and attractiveness of the project or facility to private investors and supporters.

User fees are the only additional source of funding likely to provide a funding stream adequate to implement a major transit system. It is projected that the high concentration of activity at Grand Canyon, for example, will enable user fees to finance all costs of the proposed transit system.

Private sponsorships have potential but need to be used carefully so as to avoid the perception of "commercializing" Federal lands. This is a particular concern for the NPS and USFWS facilities. Advertising potential is likely to be limited by the desire to maintain the natural, cultural, or historic environment within Federal lands.

Public-private partnerships are currently being used to fund transportation systems on Federal lands with high visitation levels. This should continue, but is not an option for most smaller, less popular locations. Other potential additional sources of funding include local option taxes and SIBs. Local option taxes are most likely to be implemented by communities that will benefit from the ATS in addition to the internal Federal lands site benefits. The SIB program is still fairly young, but could offer increased funding flexibility to some sites. Finally, financing tools are useful for leveraging revenues and accelerating construction of projects.

### **Actions for Financing Options**

Successful project financing is most likely to be achieved when developed in the context of the transportation planning process. The FLMAs, states, and MPOs are beginning to work more closely together throughout their transportation planning processes. This cooperation will leverage the expertise of State, regional and local transportation planners who can provide guidance and support through the entire planning and project development process, and in application of financing options. FLMAs are also often able to leverage funding through these relationships. Another benefit of this cooperation will be closer coordination between Federal lands site planning activities (e.g., NPS General Management Plans and Site Management Plans) and State, regional, and local transportation planning

efforts. Recent draft NPS Management Policies, for example, define a brief rationale and process for developing transit options that has strong parallels to the State and regional process.

"The Service will work cooperatively with other Federal agencies; tribal, state and local governments, regional planning bodies; citizen groups, and others to promote ATS for park access and circulation and encourage the use of public transportation wherever feasible."

Once involved in the transportation planning and project development processes, there are a number of key financial planning activities that FLMAs need to initiate. Some of the key financial activities are:

- Identify, with State, regional and/or local transportation agencies, sources of public funding that may be used for the project. Both Tables 1 and 2 in this report and the funding table in the NPS Transportation Planning Handbook<sup>7</sup> provide a good starting point for site personnel wanting to initiate this discussion. Site personnel should emphasize opportunities for leveraging funds. The ability to use certain FLHP funds to match other Federal sources is one of the more significant opportunities.
- Develop an initial financing plan with State, regional, and/or local transportation agencies after funding needs are identified. The initial plan would represent an optimal funding mix identified cooperatively between transportation agencies and site personnel. Once a "reality check" is provided on the likelihood of achieving this strategy, shortfalls can be identified, modifications made and different elements added. In many cases, site personnel may benefit from an ongoing relationship with a local transit authority or provider during the development of the financing plan.
- Perform additional market studies for projects that will involve innovative finance options. For more complex options, an independent financial advisor may be needed. These resources may be costly and can be better leveraged when transportation proposals are developed as part of site-wide planning efforts. The recent development of Gettysburg NMP's General Management Plan, for example, involved the development and analysis of very complex financial arrangements.

There are a wide variety of revenue sources and financing tools available to support transit development and implementation. However, there is no single, optimal solution that can be applied in all circumstances. Unique financial plans must be developed for each transit system. Forming partnerships with State, regional and local transportation authorities early in the planning process is the best method for developing optimal financial plans and for obtaining support for the project.

<sup>&</sup>lt;sup>6</sup>NPS, Management Policies to Guide the Management of the National Park System, 2000.

<sup>&</sup>lt;sup>7</sup>The NPS Transportation Planning Handbook is available in PDF format at http://www.nps.gov/transportation/alt/guidebook/index.htm